

(\*) Do you think that India's energy mix has taken the path of sustainable development and energy transition for a clean & green future? Critically Analyze.

India is the 6<sup>th</sup> largest economy & is expected to become 3<sup>rd</sup> largest by 2030. India is also the third largest energy consumer in the world.

As per BP energy outlook, India's share of global energy consumption expected to rise from 6% to 8% by 2030.

⇒ India's energy mix :-

→ Natural Gas :-

- It is least carbon intensive & has high hydrogen / carbon ratio
- Releases 50% less CO<sub>2</sub> than coal
- Globally, share of Natural Gas in energy mix is 24%, while it is only 6% in India.

- India aims to achieve 15% by 2030, & accelerate towards gas based economy
- Also working towards "One Nation One Grid Gas pipeline" of 16,500 km length

### ⇒ Biofuel :-

- Greater reliance on domestic sources especially biofuel.
- "SATAT" initiative aims to setup 5000 Compressed Biogas (CBG) plants by 2024 to achieve 15 MTPA

### ⇒ CNG :-

- It is green fuel & is lead & sulphur free
- Idea of using LNG for heavy vehicles & CNG for buses is being implemented in India.

### ⇒ Way forward :-

- The push towards gas based economy emphasis on EV & digital innovation in energy system will help India achieve 450 GW Renewable by 2030
- Need of hour is to opt for fuel not only efficient but also environment friendly in 2 ways
  - Decarbonisation
  - Technologies.

Thus, India has taken a responsible path of sustainable development and energy transition for clean & green future.